

**What Is Claimed Is:**

- 1 1. A method of distributing revocation state information, the method  
2 comprising:
  - 3 receiving first update scheduling information from a first party; and
  - 4 sending digital certificate revocation state information to the first
  - 5 party according to a schedule that is based on the first update scheduling
  - 6 information.
- 1 2. The method of claim 1, wherein the method further comprises:
  - 2 receiving second update scheduling information from a second
  - 3 party; and
  - 4 sending digital certificate revocation state information to the
  - 5 second party according to a schedule that is based on the second
  - 6 update scheduling information.
- 1 3. The method of claim 2, wherein the digital certificate revocation state  
2 information is sent to the first party on a different schedule than the  
3 digital certificate revocation state information is sent to the second party.
- 1 4. The method of claim 2, wherein the schedule provides that the digital  
2 certificate revocation state information is sent to the first party at an  
3 interval that is less than every 30 seconds.

1 5. The method of claim 2, wherein the schedule provides that the digital  
2 certificate revocation state information is sent to the first party at an  
3 interval that is less than every 5 seconds.

1 6. The method of claim 1, wherein the method further includes receiving  
2 new update scheduling information from the first party, and wherein  
3 when the new update scheduling information is received the digital  
4 certificate revocation state information is sent to the first party according  
5 to a schedule that is based on the new update scheduling information.

1 7. The method of claim 1, wherein the digital certificate revocation state  
2 information sent includes a certificate revocation list.

1 8. The method of claim 1, wherein the digital certificate revocation state  
2 information includes information identifying revoked certificates.

1 9. The method of claim 1, wherein the digital certificate revocation state  
2 information sent includes delta-certificate revocation list information.

1 10. The method of claim 1, wherein sending digital certificate revocation  
2 state information includes sending information using multicasting.

1 11. A method of distributing revocation state information, the method  
2 comprising:

3 receiving update scheduling information from a digital certificate  
4 verifier;

5 assembling certificate revocation information on an ongoing basis;  
6 and

7 capturing a state of the certificate revocation information as a  
8 certificate revocation list and transmitting the captured certificate  
9 revocation list to the digital certificate verifier on a schedule determined  
10 by the received update scheduling information.

1 12. The method of claim 11, wherein the captured certificate revocation list is  
2 transmitted using multicast broadcasts.

1 13. The method of claim 12, wherein the captured certificate revocation list is  
2 a delta-certificate revocation list.

1 14. The method of claim 11, wherein said update scheduling information is  
2 received during a verifier subscription process.

1 15. The method of claim 14, wherein the method further comprises receiving  
2 new update scheduling information from the verifier, and wherein the  
3 revocation state information is transmitted according to a schedule that is  
4 based on the new update scheduling information.

1 16. A method of verifying the validity of a certificate for a transaction, the  
2 method comprising:

3 sending update scheduling information to a certificate authority;  
4 and  
5 receiving certificate revocation information from the certificate  
6 authority at scheduled times based on the update scheduling information  
7 at scheduled times.

1 17. The method of claim 16, wherein the method further comprises:

2 receiving a digital certificate from a subscriber; and  
3 determining whether the digital certificate was revoked based on  
4 the received certificate revocation information.

1 18. The method of claim 16, wherein said sending update scheduling  
2 information includes determining the update scheduling information  
3 based on a potential cost of reliance on a revoked certificate.

1 19. The method of claim 15, wherein the method further comprises:  
2 receiving a digital certificate from a subscriber;  
3 determining whether the transaction is associated with a value  
4 that is above a pre-determined threshold level; and  
5 verifying the validity of the digital certificate after receiving a next  
6 update of certificate revocation information from the certificate authority.

1 20. An article of manufacture comprising a computer-readable medium  
2 having stored thereon instructions adapted to be executed by a  
3 processor, the instructions which, when executed, cause the processor  
4 to:  
5 receive first update scheduling information from a first party; and  
6 send digital certificate revocation state information to the first party  
7 according to a schedule that is based on the first update scheduling  
8 information.

1 21. The article of manufacture of claim 20, wherein the instructions stored on  
2 the computer-readable medium further include instructions adapted to be  
3 executed by a processor to:

4 receive second update scheduling information from a second  
5 party; and  
6 sending digital certificate revocation state information to the  
7 second party according to a schedule that is based on the second  
8 update scheduling information.

1 22. The article of manufacture of claim 20, wherein the first interval is not  
2 equal to the second interval.

1 23. The article of manufacture of claim 20, wherein the instructions stored on  
2 the computer-readable medium further include instructions adapted to  
3 be executed by a processor to receive new update scheduling  
4 information from the first party, and wherein the digital certificate  
5 revocation state information is sent to the first party according to a  
6 schedule that is based on the new update scheduling information.

1 24. The article of manufacture of claim 20, wherein the digital certificate  
2 revocation state information sent includes delta-certificate revocation list  
3 information.